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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,173

03/31/2004

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EXAMINER

HELLNER, MARK

ART UNIT

PAPER NUMBER

3663

MAIL DATE

DELIVERY MODE

11/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/813,173

Applicant(s)

NATI ET AL.

Examiner

Mark Hellner

Art Unit

3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-57 and 74 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-43, 48-57 and 74 is/are rejected.
- 7) ☒ Claim(s) 44-47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 40 – 42, 50-57 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gu et al.

Gu et al (figure 7c) disclose a high power fiber amplifier comprising: a master oscillator (Seed Laser) operable to generate a plurality of uniform laser pulses (schematically shown); a down counter that receives the plurality of uniform laser pulses and outputs selected ones of the pulses, the other pulses being attenuated (see schematic); and a power amplifier (Fiber Laser Amplifier) operable to receive the selected pulses from the down counter to amplify the selected pulses.

A first difference between the subject matter of claims 50—57 and Gu et al is the use of a pulse selector and pulse attenuator for the function of the down counter (703).

Paragraph [0158] of Gu et al teaches that a high speed optical switch be used for performing the function of the down counter and, as such, suggests a pulse selector and pulse attenuator because they are notoriously well known components of a high speed optical switch.

The second claim language proposed to define over Gu et al recites "wherein an attenuation level of said pulse attenuator is selected to compensate for changes in amplifier gain with changes in repetition rate.

It is noted that figure 7c of Gu et al includes control electronics coupled to seed laser, down counter and laser amplifier.

It would have been obvious for this control to coordinate the level control imposed by the down counter with the amplifiers in order to produce the waveforms shown by the schematic.

Claims 40 - 42 and 74 are rejected for the reasons applied to claims 50 – 57.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 43, 48 and 49 are rejected under 35 U.S.C. 102(e) as being anticipated by Tayebati (6,996,144).

Tayebati disclose a high power laser amplifier with a frequency control circuit comprising: a monitoring device (15) operable to monitor an emission wavelength of the laser; an adjusting device (20) operable to adjust the wavelength of the laser; and

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feedback mechanism means (output of wavelength measuring module) to provide a signal used to control and adjust the laser.

The structure recited above reads on claim 43.

Claims 48 and 49 are met by the control of the pump (25).

Claims 44 – 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication should be directed to Mark Hellner at telephone number 571 272 6981.

Mark Hellner

Primary Examiner

Au 3663

A handwritten signature in black ink that reads "Mark Hellner". The signature is written in a cursive style with a large, stylized "M" and "H".